



Material Safety Data Sheet

Pages: 4
Issued: 18-07-06
Product: HFO

1) PRODUCT DETAILS:		
Product name:	Heavy Fuel Oil	
Chemical nature:	Complex mixture of liquid hydrocarbons (C10 to C20)	
Synonyms:	HFO, HBF 100, BF150	
UN/ SIN:	1268	
ERG:	128 (3YE)	
2) COMPOSITION		
Complex blend of liquid hydrocarbons (C10 to C20). Contains aromatic oils including polycyclic aromatic hydrocarbon (PAH) compounds. Sulphur content ranges to a maximum of 3% by volume.		
Dangerous Substances	% (m/m)	Risk Phrase
Polycyclic Hydrocarbons	5 - 40	Probable carcinogenic, harmful
3) HAZARDS IDENTIFICATION		
Inflammable liquid; may be fatal if inhaled; harmful if swallowed or if absorbed through skin; probable carcinogen; severe skin irritant. Fuel oils are stored and handled hot; risk of thermal burns on skin contact.		
4) FIRST AID MEASURES		
	Symptom and Effect	First Aid
Skin	Prolonged and repeated contact with skin may cause severe irritation; Toxic if dermally absorbed; potentially carcinogenic; Burns	Wash with soap and water until no odour remains. Cool burns immediately with cool water. Seek medical advise
Eyes	Contact with eyes may cause redness, tearing, blurred vision and moderate irritation	Flush eyes with clean water for 15 minutes. Seek medical advise if irritation persists
Ingestion	Harmful or fatal if swallowed. Ingestion of this product may cause central nervous system effects	If victim is alert, give large amounts of water and seek medical advice. Small amounts can be washed from mouth until no taste persists DO NOT INDUCE VOMITING
Inhalation	Excessive exposure may cause respiratory tract irritation. Repeated prolonged exposure to high concentrations may lead to central nervous system effects, headaches, dizziness and loss of co-ordination	Immediately remove to fresh air Give oxygen if required. Seek medical advice if required
5) FIRE FIGHTING MEASURES		
SMALL FIRES: Use CO ₂ , foam or dry chemical		

LARGE FIRES: Use CO₂, fluoro protein foam or dry chemicals to extinguish the fire. Use water to cool fire exposed containers/ structures and to protect personnel. Combustion may release toxic chemicals; utilize respirators; avoid low lying areas.

6) ACCIDENTAL RELEASE MEASURES

Full protective clothing, rubber gloves (PVC, Neoprene, Nitrile, or Viton), gumboots and respirator to be worn. Shut off leaks. Remove all sources of heat or flame. Control spill by use of booms, sand, sawdust or any other suitable available medium. Recover as much free product as possible using pumps or mechanical means. Absorb residue with sawdust, sand or other absorbent material. Avoid the product entering storm water drains or waterways.

7) HANDLING AND STORAGE

Handling: Full protective clothing should be worn when handling the product. A high standard of personal hygiene is essential. Application of protective hand creams may be beneficial.

Handling temperature: Avoid extreme temperatures

Storage: Store away from strong oxidizers. Incompatible with sulphuric acid, nitric acid, caustics, aliphatic amines and amides.

Storage Conditions: Storage conditions should comply with SABS Code 0131:1979-2 and SABS Code 089:1999-1. Product should be stored in a well ventilated area. Sparks, flames and other sources of ignition near the product should be avoided. Do not eat, drink or smoke in storage area.

8) EXPOSURE CONTROLS/ PERSONAL PROTECTION

Occupational Exposure Limits:	OHSA 0.2mg/m ₃ TWA OEL-RL
Controls:	Store in accordance to SABS089:1999-1 or SABS0131:1979
Personal protection	Ensure adequate tank ventilation If engineering controls and work practices are not effective in controlling this material, then wear suitable personal protection equipment including overalls, impervious gloves, respirators, safety goggles, safety boots or gumboots.

9) PHYSICAL AND CHEMICAL PROPERTIES

Black viscous liquid with characteristic hydrocarbon odour. Low solubility in water.
 Density @ 20_{oc}, kg/l: 0.87 – 0.99
 Flashpoint @ 101, 325 kPa: 66_{oc}
 Boiling Point: +150_{oc}
 Viscosity (cSt): 120 @ 50_{oc}

10) STABILITY AND REACTIVITY

Partially volatile at temperatures in excess of 70_c; avoid strong oxidizers. Incompatible with sulphuric acid, nitric acid, caustics, aliphatic amines and amides

11) TOXICOLOGICAL INFORMATION

Some components of the product are suspected carcinogens. Potential harmful effects to liver, kidneys, heart, lungs and nervous system may result from chronic over exposure. Some of the components of the product have been associated with immunological, reproductive, fetotoxic and genotoxic effects	
12) ECOLOGICAL INFORMATION	
No ecological problems are expected if the product is handled and used with due care. When released to the environmental, some evaporation and biodegradation will occur. Some components of the product are soluble in water and may contaminate groundwater reserves. Some components of the product will persist in soil. Material is moderately toxic to aquatic organisms.	
13) DISPOSAL CONSIDERATIONS	
Do not flush to drain/ storm sewer. Product must be disposed of in an approved hazardous waste disposal site or an approved incinerator.	
14) TRANSPORT INFORMATION	
SIN	1268
ERG:	128 3YE
ICS:	Class 3: Group III
IMDG Code:	Class 3
Marine Pollutant:	Yes
15) REGULATORY INFORMATION	
National Legislation N/A	
16) OTHER INFORMATION	
For more information please contact SA Oil Refiners on (031) 7646126 All information is given in good faith but without guarantee in respect of accuracy and no responsibility is accepted for errors or omissions or the consequences thereof	